

Increasing Profitability of Utility Distributors Through Developing Sales and Marketing Strategies to Meet the Challenges of a Changing Electrical Utility Industry

by

Rachelle Guzal

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School of Engineering

Chair of Committee, Dr. Matthew Kebelis

Steering Committee Members: Francisco Santos, Director Supplier Relations Wesco Inc.

Cathy Gutierrez, Executive Director North American Association of Utility Distributors

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Abstract

This study is designed to address the future relevancy of the electric distributor within the utility industry and how the electrical distributor can optimize a trajectory of relevancy, innovation and future growth. The electric utility industry is undergoing numerous transformational changes responding to environmental, regulatory, and technological disruptions. Utilities are consolidating to adapt to these changes. These disruptions and consolidations are creating a strain on the revenue and profitability of many electric utility distributors. Companies are finding that the traditional growth levers such as increasing volume and prices, as well as cutting costs and investment are becoming increasingly less effective (Jones & McCue, 2017). However, an often forgotten but highly impactful lever, the sales & marketing function, has proven to double EBITDA by implementing best practices across the function. Empowering the sales force with accurate information helps them in making crucial pricing decisions, determine which customers to approach, and how to serve them. Optimization of sales and marketing functions is essential and will ultimately not only improve profitability but position the industry for future leadership and growth through innovation.

This research project sought to analyze the state of the industry, understand the current sales and marketing strategies distributors are currently using to meet these challenges and to identify opportunities to optimize those strategies to positively impact profitability. The study shows that the utility industry is consolidating. However, overall consumer demand, revenue, profit and capital expenditures are holding steady in the aggregate for the industry. Electric distributors, in the aggregate, have experienced a rebound in revenues but they have done so at the expense of profit through pursuing a low-cost selling strategy. The results of the research identified areas of opportunity that can be optimized and, by following a best practice, improve profitability. Specifically, implementing best practice in cost to serve, customer stratification, and pricing optimizations strategies offer potential to improve the bottom line. Additionally, pursuing an optimized marketing framework that includes micro-segmentation, target market development, and value proposition development, offer further opportunities to improve revenue and position the industry for further growth long term.

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1.0 INTRODUCTION

The U.S. electric utility industry comprises power generation, transmission, and distribution. Industrial distributors who service the utility market segment fall into two main categories: full-line electrical distributors or niche distributors focused specifically on the utility market. Many of these distributors are members of the North American Association of Utility Distributors (NAAUD) with \$2.6 billion in combined utility product sales that stock \$440 million of inventory from 30 manufacturers in 230 locations across North America (Lucy, Utility Market 101, 2016)

Electric utilities serve a ubiquitous function within society. Because of the unique characteristics of utilities, the sales and marketing approach of distributors is much different from those required in commercial, industrial and residential markets. The sales force within the commercial and industrial markets are accustomed to presenting line cards and relying on transactional sales. In contrast, the electric utility market segment requires distributors to be very responsive and provide highly specialized packages of value-added services such as 24/7 emergency storm recovery service, on-site storeroom management, kitting, equipment calibration and repair. While the segment presents challenges, historically the customer base and spend has been relatively stable

The utility market segment has been experiencing many changes and challenges as the utilities face enormous headwinds from environmental, regulatory and technological forces. Environmental concerns caused by global warming have altered social and political attitudes creating increased demand for renewable energy generation. Many state and local governments are incentivizing consumers with rebates to invest in home solar panels. At the same time, mandates put pressure on utility companies to achieve net zero emissions goals. Increasingly utility capital expenditure budgets are spent fighting cyber threats leaving fewer and fewer dollars available for other capital expenditure projects. These disruptive forces have been a strain on many utilities companies as they see expenses rising while revenue remains flat. Many have found it hard to adapt while others have embraced the change making the appropriate adjustments that will carry them into a new era of energy; Thus, utilities are in a transformation and consolidation phase. Consolidation has the effect of leveraging economies of scale and applying downward pressure on pricing negatively impacting distributors serving the utility segment.

On the other hand, technological advancements within the electric utility industry are also creating new opportunities. For example, as preparations are made for electric vehicles, utilities could begin to see an uptick in demand for electricity where distributed energy resources (DER's) have recently lowered that demand. Technological advances in battery storage, solar power systems, and wind farms are making it possible for utility companies specializing in transmission to expand vertically into generation. Other technological advancements such as 5G telecommunication networks and IoT are rapidly increasing the demand for "smart" solutions. Many opportunities exist for electric utility companies as well as electric utility distributors to capitalize on the coming wave of IoT and other technological advances.

Extensive research has been performed on the disruptive forces impacting electric utilities companies. Much research has also been conducted on the affect Amazon and e-commerce is having on industrial distributors. Yet, little research has sought to understand the influence these changes are having on the ROI of utility distributors sales and marketing functions. As the landscape of the utility industry undergoes transformational change, the impact on the utility distributors' sales and marketing

strategies should not be ignored. The goal of this research is to understand the affect industry transformation is having on utility distributors sales and profits, examine the current sales and marketing processes of the electrical distributors, and identify possible areas of improvement to optimize those functions. This paper develops a process framework that will focus on optimizing the sales & marketing ROI through identifying strategies to improve processes within sales, pricing and marketing management. Insight gained from such a study would help utility distributors improve the value they add to utility partners, increase ROI of the sales and marketing functions and positively impact profitability of the firm.

2.0 LITERATURE REVIEW OF THE CHANGING UTILITY INDUSTRY

2.1 Review of Customer Base

Historically, the notion of a utility ‘death spiral’ related to a condition where a utility company finds a price increase to be futile in raising enough revenues to cover rising costs (Costello & Hemphill, 2014). While the term entered the industry lexicon more than 27 years ago due to rising costs, current concerns revolve around decreasing revenue. Advancements in distributed energy resources (DER) such as rooftop solar have created fear of a drastic reduction in demand. As recently as 2019, 71 percent of utilities believe the death spiral is a possible outcome. Of the 71 percent, 47.8 percent believe the death spiral is a potential outcome if utilities fail to add alternative energy solutions to their generation mix. However, 28.9 percent believe death spiral will not occur because the move to decentralized generation will be slow and there will continue to be a need for a stable, centralized power source (2019 Black & Veatch Strategic Direction: Electric Report, 2019). One of the questions this research sought to answer is the validity to the myth of an industry death spiral.

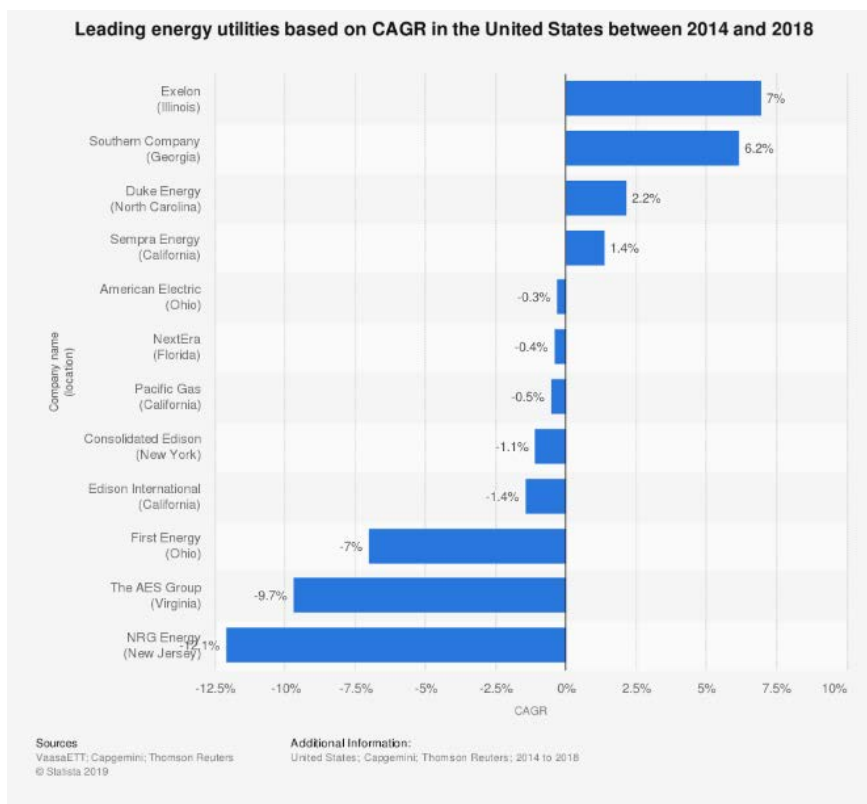


Figure 1

Concerns over eroding revenue resulting from environmental factors, regulatory and disruptive technologies are not unfounded. Many utility companies are struggling financially. For example, PG&E one of the nation’s largest electric power distributors filed for bankruptcy in January 2019 (Blunt, 2020). The bankruptcy was largely due to liability from wildfires. However, mismanagement was also a contributing factor. Other utilities are struggling financially due to large capital project overruns to meet new regulatory emissions standards and grid modernization. In 2017, South Carolina Gas & Electric scrapped a nuclear power plant project after massive overruns. In January of

2018, SCG&E’s parent company was sold to Dominion Power. In another recent merger, NextEra energy acquired Florida-based Gulf Power. Utility companies are consolidating through mergers to achieve the necessary economies of scale, diversify energy generation to help achieve clean power initiatives, and respond to increased customer expectations for reliability and higher quality service (Costello & Hemphill, 2014).

As the graph in figure 1 indicates, while some companies are struggling with growth and may be experiencing individual death spirals, other companies are finding opportunities. History has proven there are three reasons why firms experience financial ruin in a dynamic, disruptive environment: inertia and complacency, poor management strategies, and unstoppable market trends (Costello & Hemphill, 2014). Despite facing numerous difficulties, extinction is not inevitable. Statistic like those shown in figure 1 indicate utility companies willing to adapt can find opportunities for growth.

One of the central fears precipitating the death spiral belief is the decrease in revenue as DERs siphon demand away from the centralized grid. The research sought to understand the impact residential, commercial, and industrial solar energy is having on the overall demand within the utility industry. To what extent has a reduction in customer demand impacted companies' revenue? According to EIA data in figures 2 and 3, power consumption in retail and commercial customers has remained relatively stable for over 20 years.

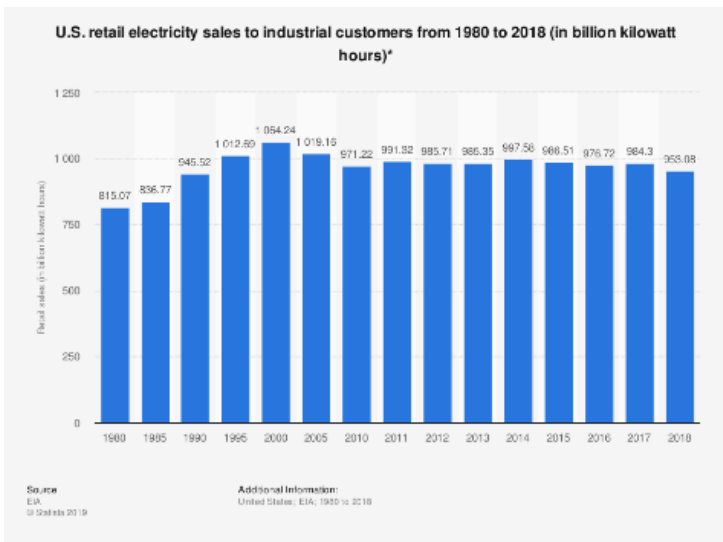


Figure 2 Source: EIA

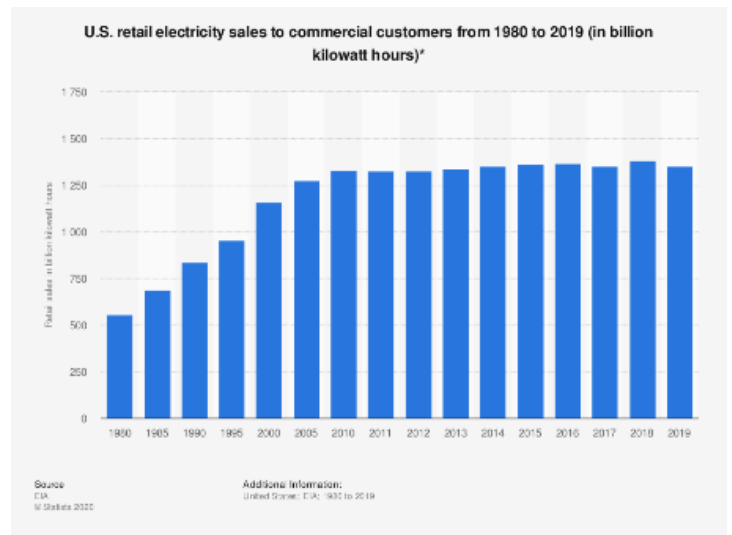


Figure 3 Source: EIA

The long-term projections reflect modest demand growth largely offset by increases in energy efficiency as well as growth in rooftop photovoltaic systems. By 2050, end-use solar accounts for 4% of U.S. generation. Consequently, the annual growth in electricity demand averages about 1% through 2050 (EIA Energy Outlooks, 2020). The data indicates alternate energy slows the growth rate of demand not the demand itself. Thus, revenue projections for utilities in the aggregate should hold steady or grow slightly through 2050.

A closer look at earnings for the industry reveals a healthy picture overall as well. In 2016 investor owned electric utility pretax operating income rose 3

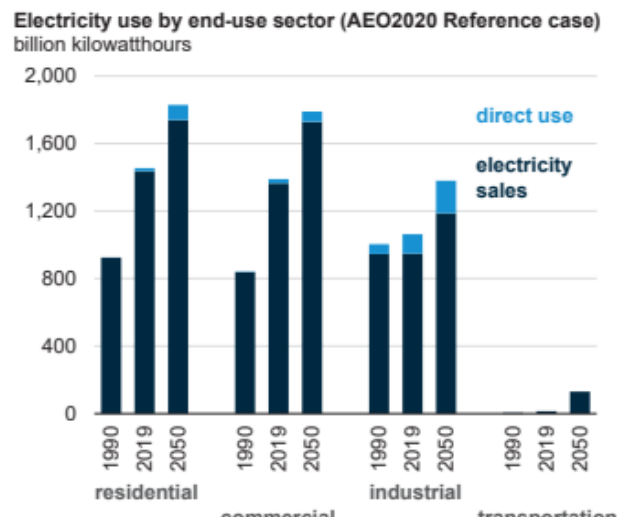


Figure 4 Electricity demand grows slowly through 2050 in the AEO2020 Reference case

percent and net income rose 17 percent despite flat sales. Furthermore, from 2012 to 2016, electricity generation rose less than 1 percent, but industry pretax operating income increased 12 percent over the period and earnings before interest, taxes, depreciation and amortization (EBITDA) rose by 16 percent. Over the same five-year period, invested capital rose 23 percent and net plant, 27 percent (HYMAN & TILLES, 2017).

Duke and Exelon are two examples of utilities successfully adapting to change. Duke Energy took the top position for most profitable for 2019. Exelon, the fifth largest utility in the U.S. as of April 2019, is one of the cleanest and lowest-cost power generation fleets and has one of the largest retail customer bases in the United States. Exelon has been building on a strategy to pursue continued commitment to sustainable growth and competitive markets, helping drive customer choice, innovation, and efficiency.

Currently total annual revenue of the utility industry is \$908.3 billion with a total profit of \$211 billion. An annualized growth rate of 2.1% and total revenue of \$1.0 trillion is projected by 2024 for the sector. Increasing revenue and slightly higher prices are expected to produce a slight increase in profits. (Patel, 2019).

Clearly opportunities for profitable growth are possible for forward looking utility companies committed to embracing the change created by disruptive forces. However, as an industry, it appears that further consolidation will continue into the foreseeable future. The research appears to suggest that while some utilities will experience a death spiral scenario as disruption occurs throughout the industry, firms will persevere if they are proactive, pursue appropriate operational execution, and identify areas of opportunity.

To get a clearer picture of opportunities and impact on electric distributors serving the utilities, the research examined current and projected capital expenditures. Electricity generation related capital

Selected utilities' generation, environmental and renewables capex, 2019-2021 (\$M)

	Generation	Environmental	Renewables	Total
NextEra Energy	4,724	150	16,496	21,370
Southern Co.	8,300	2,700	0	11,000
Duke Energy	4,960	2,575	3,160	10,695
Exelon Corp.	5,575	0	0	5,575
Xcel Energy	1,860	0	3,660	5,520
Entergy Corp.	4,300	0	420	4,720
DTE Energy	3,000	0	0	3,000
Dominion Energy	2,080	147	0	2,227

Data compiled Oct. 16, 2019.
Source: S&P Global Market Intelligence

Figure 5

expenditures are expected to total around \$87 Billion for 20-21. Generation expansion and modernization as well as renewable and environmental expenditures account for the generation capital expenditures. A look at the chart in Figure 5 highlights NextEra leads all utility companies by a wide margin and expects to spend \$21.4 billion on generation related activity with Southern, Duke, and Exelon

following by a wide margin (Sperduto, 2019).

Electric transmission and distribution capital expenditure for 2020 will remain steady at around \$52 Billion and a forecast to remain strong through 2023 with the major expenditures coming from AEP, Duke, Exelon, Sempra, and NextEra Energy. (Sperduto, 2019)

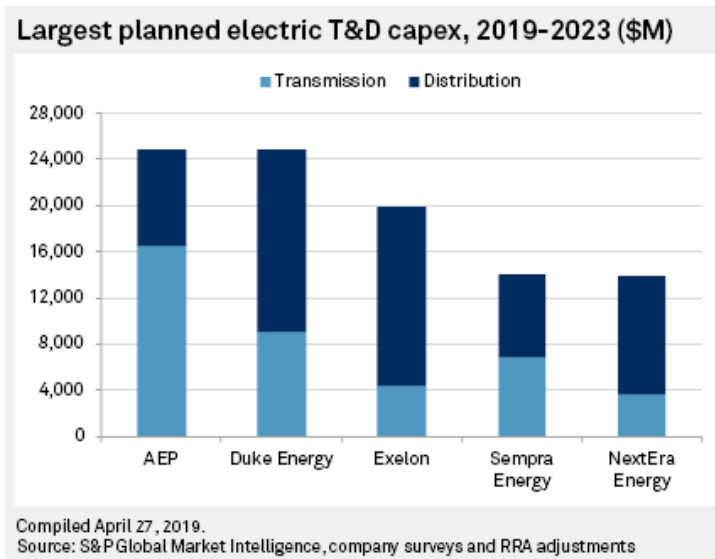


Figure 6

Duke, Exelon, Sempra, and NextEra Energy. (Sperduto, 2019)

Research does not indicate a decline of capital expenses which directly impacts the utility distributors as most of distributor sales come from utility capital expenditure budgets.

Some utility companies are clearly struggling. Others are reacting aggressively and proactively to the changing tides within the industry. Consolidation within the industry is clear.

Overall, the electric utility industry appears to be holding steady in terms of consumer demand, rates, revenue, capital expenditures and profit.

2.2 Review of the Electric Distributors

The electric distributors that serve utility companies present a different financial picture from their customer base-electric utilities. Despite losing ground during the great recession, the companies appear to have rebounded somewhat from a revenue perspective. However, most distributors are struggling to

Distributors have not regained margins during the recovery.

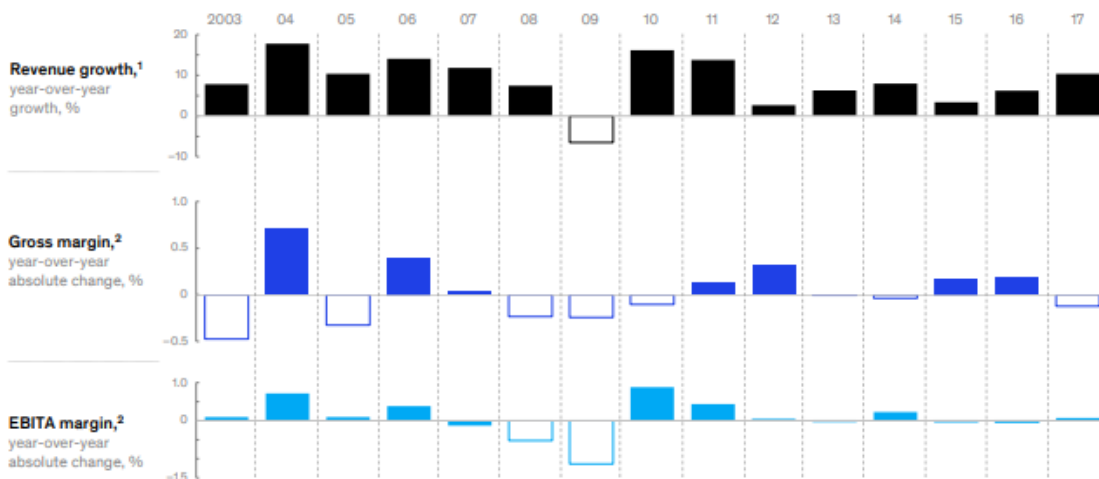


Figure 7

¹ Revenue growth calculated in local currencies and then weighted by average USD revenue over the time period. ² Weighted by revenue in USD.
SOURCE: McKinsey CPAnalytics

improve their profit profile. The chart in figure 7 shows variable revenue growth from 2010 through 2017. However, the year over year EBITA margin continues to hover around zero. The top line growth and stagnant bottom line suggests something is wrong from an operational perspective.

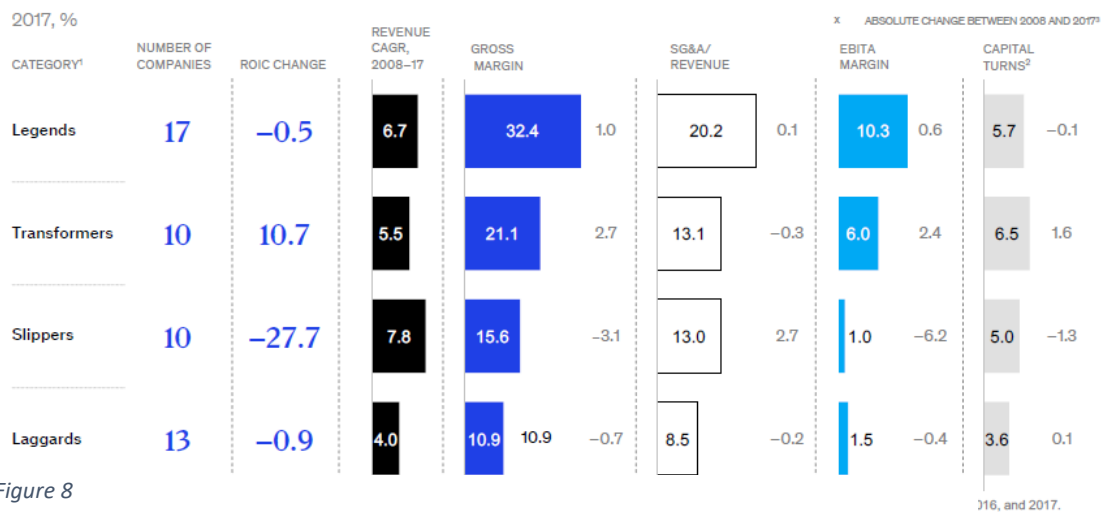
The broader wholesale electric distribution market sales total approximately \$160B. The wholesale electric distribution industry is highly fragmented. There are about 15,000 companies in the United States in the B2B electrical product industry according to Hoovers. Within the industry, 96% of companies have 50 employees or less. The top 20 companies in the industry account for 42% of revenue. The industry is made up of a few very large firms and thousands of very small firms.

The utility industry represents a market segment for full-line electric wholesale distributors while other distributors focus completely on the utility industry. The merger of Wesco and Anixter will represent approximately \$2B in sales to utilities and represent the largest suppliers to the utility industry.

Amazon continues to make a big play in the wholesale electric with revenues for Amazon Business topping \$6B in 2018. However, the unique characteristics and full-service requirements of utilities represent barriers of entry for Amazon and offer a small level of protection for small, niche companies at least in the short run.

While large public companies like Wesco and Anixter report profit margins of around 2.5%, research by McKinsey provides a glimpse into what is driving poor profitability of the industry (Abdelnour, et al., 2019). The chart below breaks up distributors into four categories: Legends, Transformers, Slippers, and Laggards. Looking particularly at the *Transformer Group* below, a revenue CAGR of 5.5% and a ROIC change of 10.7 results in gross margin increasing to 21.1 while EBITA increases from 2.4% to 6%. Conversely, a look at the *Slippers Group* reveals that while revenue CAGR was an acceptable 7.8%, there was a -27.7 change in ROIC and EBITA fell from 6.2% to 1%. This chart clearly indicates the issue. The slippers appear to have undertaken a low pricing strategy to win shares which resulted in losing 3% of gross margin as well as decreasing turns by 1.3 times resulting in increased inventory.

Transformers improved ROIC through profitable growth; slippers grew revenue at the expense of margin.



2.3 Marketing and Sales

A great deal of research exists to suggest that within the various distribution functions, most distributors have leaned out their source, stock, and store functions. For wholesale distributors, the sales and marketing functions have the largest share of human resources as evidenced by the sales and marketing expenses represented as a percentage of gross margin dollars. In fact, based on research conducted at Texas A&M University, sales and marketing expenses account for more than 25% of total gross margin dollars for two-thirds of survey respondents. (Lawrence, Gunasekaran, & Krishnadevarajan, Sales and Marketing Optimization, 2012)

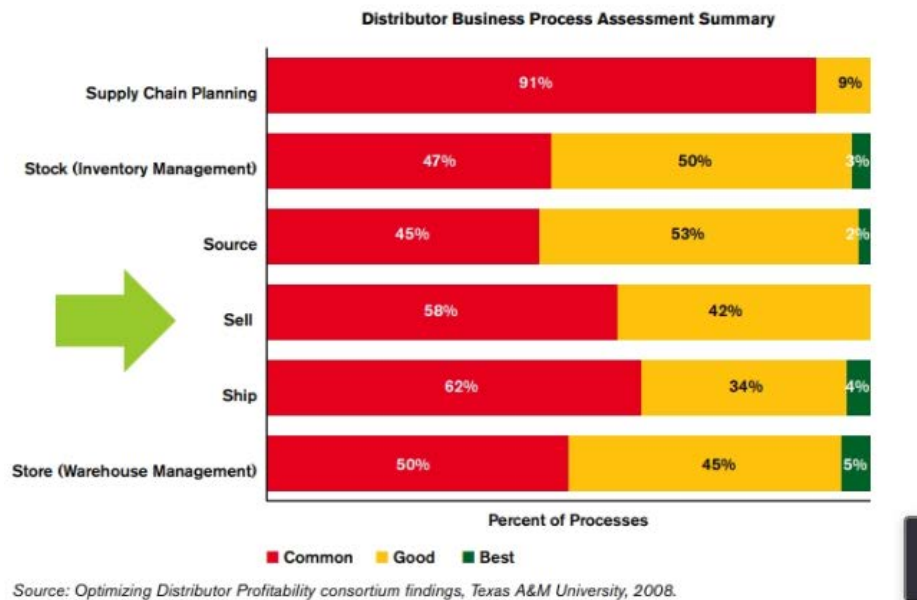


Figure 9 (Lawrence, Gunasekaren, & Krishnadevarajan, *Optimizing Distributor Profitability*, 2009)

Very little research exists to understand the current efficiency and effectiveness of sales, pricing, and marketing management strategies and processes and the associated ROI of these activities.

3.0 RESEARCH METHODOLOGY

3.1 Research Model

Analysis of previous research including scholarly journals, textbooks, and industry publications were used to understand the context of the utility industry and wholesale electric distribution. Attending the Integrated Supply Chain Utility Purchasing Management Group (UPMG) Conference, conducting interviews with several of the attendees, and collecting survey responses from NAAUD members provided further insight and foundation for the research methodology.

Extensive research into distributor profitability has been performed through the Texas A&M Thomas & Joan Read Center for Distribution Research and Education. Relying heavily on the customer stratification framework, distributor profitability optimization and sales & marketing optimization research performed in the Global Supply Chain Laboratory at Texas A&M, this paper will develop a comprehensive framework of best practices applied specifically to the sales and marketing activities identified for the greatest opportunity of improvement.

Applying a comprehensive framework focused on optimizing the sales and marketing levers through improving the current state of customer strategy, pricing strategy, and marketing strategy and effectively connecting them to financial metrics will help improve the ROI of these activities and drive profitability. Analysis of previous research including scholarly journals, textbooks, and industry publications was also used to formulate the components of the framework. This framework will also connect the relationship between the ideal customer, the target marketing, and value proposition.

Research indicates that customer profitability analysis performed on individual customers significantly drives business performance. Many of the utility distributors belonging to NAAUD perform some variation of customer analysis seeking to identify profitable vs. non-profitable customers. However, most utilities find measuring cost to serve difficult. A 2011 survey found only 11% of distributors tracked cost to serve (Lawrence F. B., 2011). Furthermore, many only perform analysis using single dimension criteria and struggle to effectively act on the analysis. Utilizing existing academic research, surveys of utility distributors as well as, this model aims to identify those activities and metrics related to customer analysis currently used by distributors to determine the baseline performance for these activities. It will also examine how utility distributors currently identify potential profitable customers

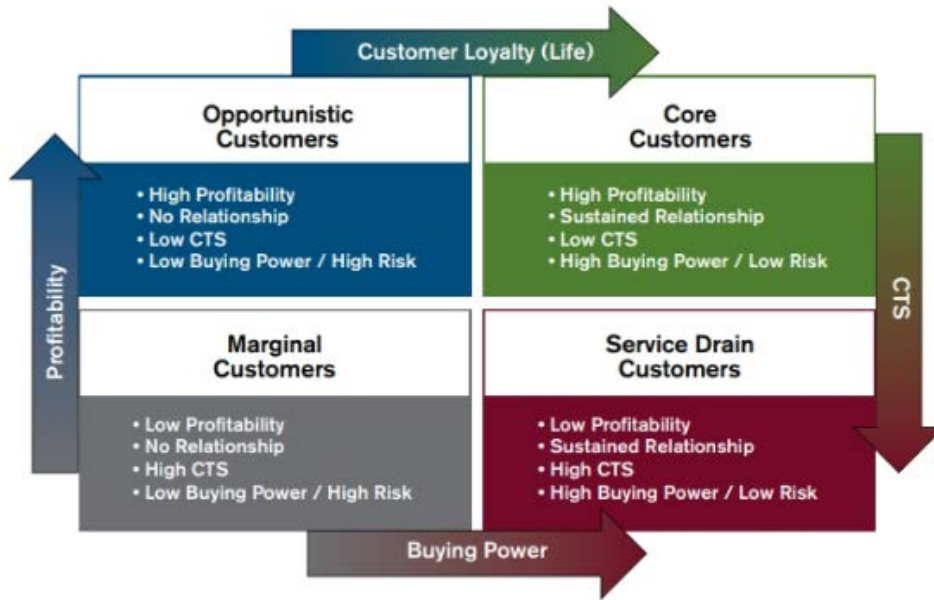


Figure 10 (Lawrence F. B., 2011) Customer Stratification

The Customer Stratification matrix developed by Texas A&M classifies customers based on four dimensions: buying power, profitability, customer lifetime loyalty, and cost to serve. Those classified as core customers pay well, access core competencies at decent volumes and are retained for a long time.

Because of the disruptive transformation currently impacting the utility industry, this paper will next look at the market segmentation practices of the surveyed distributors to discover opportunities to improve the segmentation process while aligning the market opportunities with core customer opportunities. The four processes reviewed are existing market segment management, existing products management, new product and service development and new market segment development. Historically, only 3% of distributors perform existing market segment management and only 3% use best practices in new market segment development (Lawrence F. B., 2011). Finally, the paper will examine sales process design and measure the effectiveness of the current process of surveyed distributors. The goal of examining the performance of these processes is to demonstrate the relevance of the metrics and illuminate improvement potentials. When executed in combination at best practice levels, increased revenue and profit can be achieved despite the considerable headwinds faced within the industry.

3.2 Data Acquisition

The data for this project was accumulated through the analysis of a survey data primarily from NAUUD members and others as well as data from previous research. NAAUD members support a customer base of public, private and co-op utility companies throughout North America. Conversations with various utility distributors and survey data provided insight into current customer analysis, market segmentation, sales force effectiveness and other factors which are often considered when developing a sales optimization strategy within the organization.

4.0 RESULTS

4.1 Customer Stratification

Respondents were asked several questions regarding customer ranking. All respondents indicated their firm performed some type of customer ranking. 57% believed the ranking was accurate and 43% were not sure. 67% believed their company was exceptional or above average at executing on the outcome of the company ranking. Less than half believed their company acted upon the information provided from the customer ranking. 67% indicated their company utilized a multi-dimensional approach at customer ranking.

Taking a closer look at the data, 71% of those surveyed indicated they use some form of measuring cost to serve with Balance Scorecard and ABC accounting system leading the responses. However, only 28% of those surveyed used cost to serve as criteria for customer stratification.

In regards to customer stratification, best practice activities include multi-dimensional customer ranking which includes a robust cost to serve element. While all respondents indicated they perform customer ranking there appears to be an opportunity to optimize this activity through including more than a single criteria and including cost to serve.

4.2 Sales Force Activities

All respondents indicated their sales force efforts were directed toward activities that provide the most value to present and future customers while 57% believed sales efforts represented greatest potential for maximizing revenue and gross margin.

Digging deeper into how the firm determines the most important opportunities and presents them to salespeople, the most common responses included market feedback/research, data analysis, and the salesforce makes the determination.

Nearly all respondents indicated they had defined sales process. In addition to the typical sales activities of presentations, negotiation, closing and order management, survey questions dug deeper into the sales activities. The survey asked questions regarding how they come to understand customer pain points, if they engaged in solution designing for prospective customers, did they estimate potential of prospects, how they identified potential data for leads, and did they perform activities designed to sustain relationships and retain customers. No respondent performed every listed sales activity. However, 65% of firms surveyed performed most of the activities.

While most companies have several elements of a defined sales process, opportunities exist in how opportunities were determined and presented to the sales force as well as in how customer pain points surfaced and were acted upon.

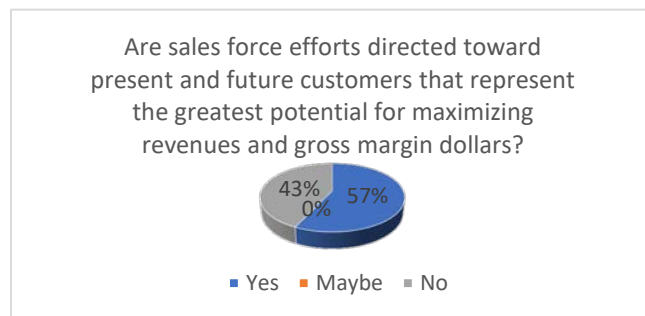


Figure 11

4.3 Marketing Strategy

Despite only 8% of respondents indicating they perform micro segmentation 25% say they make target market selections while 50% indicate they create value propositions based on market selection.

Responses to how marketing performance is measured included customer engagement, sales, gross margin, and market penetration.

When asked about criteria used to select target markets there were a wide variety of answers. No real trends emerged. A few of the responses include:

customer's purchasing strategy, supplier alignments in that market, ability to bring value to those customers, supplier loyalty, geographic coverage, historical trends, and customer needs.

When asked what financial metrics were used to measure performance of marketing activities some of the recurring responses included: contribution margin, profitability, sales, share of spend, gross margin, ROI, Supplier feedback, and distributor rankings

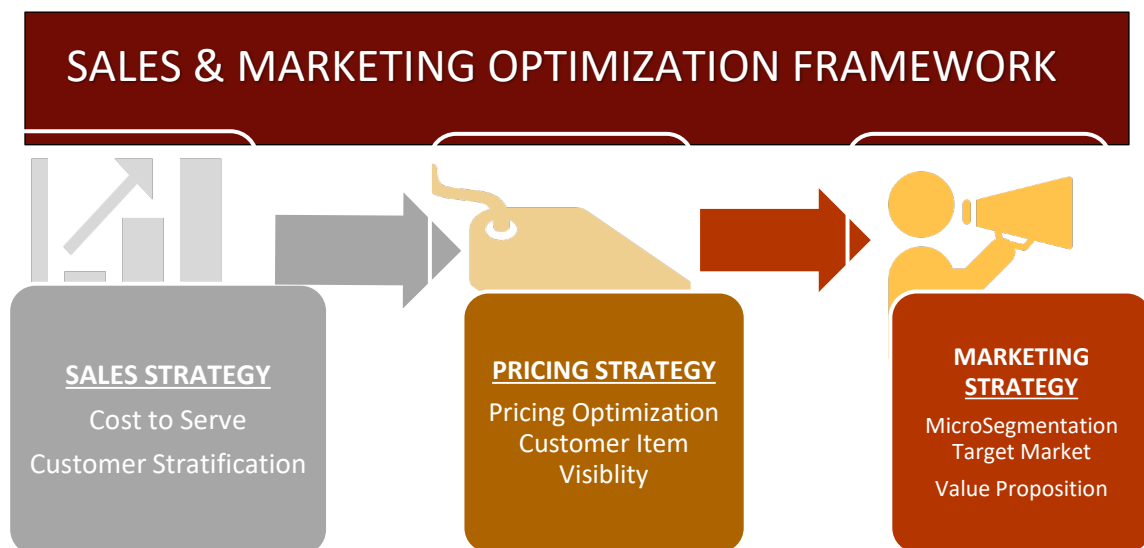
In response to the question how do you identify the business you want to do common answers included: Industry trends, knowledge, and serviceability; % of chance at winning the business, fit between opportunity and marketing strategy, geographic area, profit contribution potential.

5.0 SALES AND MARKETING OPTIMIZATION FOR ELECTRIC UTILITY DISTRIBUTORS

The data presented earlier in figure 8 revealed two stark realities. The Transformer Groups revenue CAGR was 5.5 while the Slipper Group's revenue CAGR was 7.8. However, despite the revenue CAGR being a full 2 percentage points less than the Slipper Group, the Transformer Group EBITA margin grew 2.4% while the Slipper Group EBITA decreased 6.2%. Furthermore, the Transformers ROIC increased 10.7% while the Slippers ROIC decreased 27.7. Clearly, the Transformers realized profitable growth. Conversely, the slippers grew revenue at the expense of profit.

Implementing best practice customer stratification which includes a cost-to-serve dimension along with a complimentary pricing structure & robust marketing best practice approach will help to identify core customers who pay higher margins as well as target the right customer bringing a higher ROI on marketing activities.

This section will detail the steps within each dimension of the sales and marketing optimization framework.



Companies are finding that the traditional growth levers such as increasing volume and prices, cutting costs and investment are becoming less effective (Jones & McCue, 2017). An often forgotten but highly impactful lever, the sales & marketing function, has proven to double EBITDA by implementing best practices across the function. Empowering the sales force with accurate information helps them in making crucial pricing decisions, determine which customers to approach, and how to serve them. Optimization of sales and marketing functions will improve profitability.

Based on the survey data collected from NAAUD members, the research identified three areas of improvement that can positively impact profitability:

- Sales Strategies

- Pricing Strategies
- Marketing Strategies

5.1 Sales Strategy

Cost to Serve

Cost to serve is the first building block in developing effective sales, pricing, and marketing strategies. Each customer has unique characteristics that represent different expenses to the distributor. For example, a customer who never needs attention from your inside and outside salesforce, orders high turn items on a regular basis from your e-commerce platform, pays on the spot and rarely returns items costs the company represents one set of expenses. On the other hand, a customer who requires hand holding, complex solutions, needs services outside of your core capabilities, looks for bargains and does not order frequently represents a vastly different set of expenses to your organization.

Cost to Serve is critical in any pricing decision and is an important input into best practice customer stratification.

Best practice cost to serve can be achieved through an effective activity-based cost accounting system or through a surrogate method using multi-criteria decision model.

The cost to serve matrix developed through the Texas A&M Global Supply Chain Laboratory has proven profitability improvements (Lawrence, Gunasekaren, & Krishnadevarajan, Optimizing Distributor Profitability, 2009).

The steps outline below will arrive at a thorough cost to serve model for your customer based.

Steps to establishing Cost to Serve measurement based on A, B, C, D ranking:

1. Identify the metrics important to your organization. Some factors to consider including in your criteria include:
 - Average order size & number of orders-Revenue of customer
 - Delivery requirements-
 - Days to Pay
 - Cost of Sales calls-# of visits required before the sale
 - Product Mix accessed-A/B items vs C/D items
 - Return on sales ratio
2. Identify 3 to 4 factors to measure. Apply a percentage weight to each based on the level of importance.
 - a. Days to Pay = 30%, Average Order Size= 50%, Delivery Requirements = 20%
3. Determine relative importance by assigning points to A,B,C, & D ranks
 - a. For example A= 40, B=30, C=20, D=10
4. Divide the 40 point scale evenly into the four ranking category ranges
 - a. A= 32.6-40 B=25.1-32.5 C=17.6-25 D=10-17.5
5. Determine the parameters for each metric
 - a. Days to Pay: A=within 30 days, B=31-69, c= 61-75 D= more than 75

- b. Average order size: A = more than \$1000, B= 700-999, C= 400-699, D=less than 300
 - c. Delivery Requirements: A= more than 15 days, B= 10-14 days, C=5-9, D=1-4
6. Determine final rank

Example: Company A DOP = 28 days; Ave Order Size = \$1500; Delivery 6 days →

$$\text{DOP} = A; \text{Ave Order Size} = A; \text{Delivery} = C$$

$$[(40 \times 30\%) + (40 \times 50\%) + (20 \times 20\%)] = 36$$

Overall CTS Rank = A

The graph below illustrates the linkage between reducing cost to serve and increasing profit. In this example as a customer's number of lines per order increase, operating expenses decrease as a result, net margin increases and positively impacts EBITDA and RONA. This connection can be made for any metric associated with cost of a customer. A customer with a low Days to Pay will improve cash conversion cycle which improves cash flow and asset efficiency. The increase in EBITA and cash flow can then be re-deployed toward other strategic growth initiatives.

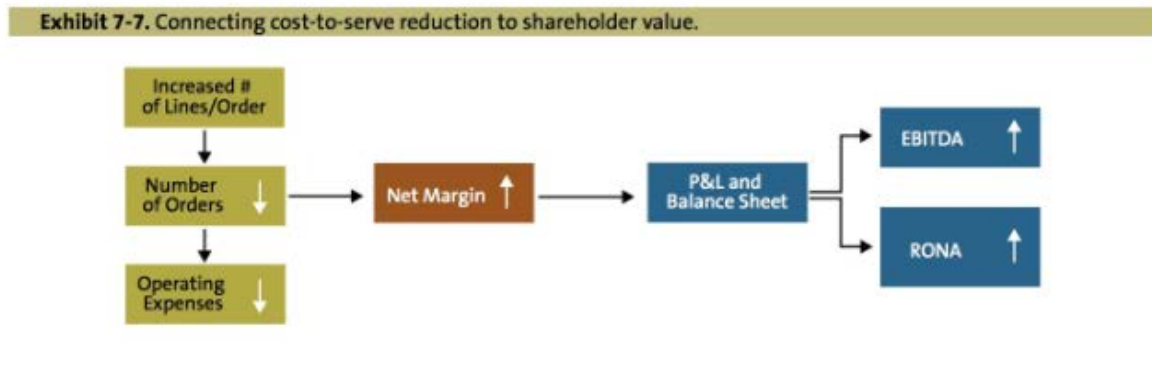


Figure 12 (Lawrence, Gunasekaren, & Krishnadevarajan, *Optimizing Distributor Profitability*, 2009)

Customer Stratification

Customer stratification is the process of categorizing customers based on factors such as cost to serve, profitability, loyalty, and buying power. The current disruptive business environment has put increased pressure on utility distributors to look for ways to improve business processes. Research shows only 21% of distributors utilize processes best practice when it comes to customer stratification (Lawrence F. B., 2011). To remain competitive and profitable, these companies must increase efficiencies through adapting best practices across their functional areas. By adopting best practices, industrial distribution firms can increase earnings before interest, taxes, depreciation, and amortization (EBITDA) by more than 100% (Lawrence, Gunasekaran, & Krishnadevarajan, 2009).

Implementing a multi-dimensional best practice customer ranking process helps identify profitable versus unprofitable customers as well as customers who are worth providing extra service and special pricing. Deciding how to deal with the least profitable customers can have a significant impact on overall profitability.

A review of literature identified several methods for ranking customers by revenue, buying potential, costs to serve, and profit. Adequate customer stratification models currently exist. A frequently cited example, Best Buy, classifies its customers as angels and devils (McWilliam, 2004). Many service industries such as the airline and hotel industries use a tiered-customer approach. As early as 2001 companies such as FedEx, GE Capital and Bank of America discovered providing different service to customers depending on their profitability is an effective and profitable strategy. These firms were some of the first to understand all customers do not need to be treated equally and in fact some customers were too costly to do business with (Zeithaml, Rust, & Lemon, Summer 2001). Customer cost-based pricing (CCP) is a strategy of charging customers higher prices based upon their cost to serve (Fowler, Natarajathinam, & Patwari, 2016).

The Customer Stratification (CS) Framework is a multi-dimensional approach to customer ranking which places emphasis on cost to serve and has been widely accepted and implemented by industrial distributors as a driver of their customer pricing policies.

Customer stratification through multi-criteria best practice has consistently shown that **80% of profit comes from 10% of customers** (Lawrence F. B., 2011). Identifying those 10% of core customers is fundamental to improving profitability. Once they have been identified, the sales force can focus on protecting that core customer group and work on developing the next potential core customer. To incentivize the salesforce to protect and seek out core customers, the compensation design must reward the salesforce based on a customer's profit profile not on revenue.

The Texas A&M University customer stratification model is based on four critical dimensions. The detailed steps are as follows:

1. Sales Volume

- a. A = Top 60% of sales
- b. B = Next 20% of sales
- c. C=Next 10% of sales
- d. D=Next 10% of sales

2. Gross Margin

As evidence by the current revenue vs. profitability picture for the electric utility distributor industry as a whole, sales volume alone does not indicate a profitable customer. GM helps to determine the negotiating effectiveness of the customer

- A = Top 60% of GM\$
- B = Next 20% of GM\$
- C=Next 10% of GM\$
- D=Next 10% of GM\$

3. Cost to Serve

CTS helps to determine the true profitability of the customer and eats into GM. Utilize the CTS ranking above

4. Customer Life/Loyalty

Loyalty is an indicator of frequency and time span of orders. Hits and number of orders over a given time period can be used.

- A = Top 60% of hits
- B = Next 20% of hits

C=Next 10% of hits
D=Next 10% of hits

5. Once ranks are determined for all 4 dimensions, combine Sales and hits at 50% weighting each
 - a. For example:

- i. If a customer ranks A on sales and B on hits $[(40 \times 50\%) + (30 \times 50\%)] = 35 = A$

- AND ranks B on GM and A on CTS $[(30 \times 50\%) + (40 \times 50\%)] = 35 = A$

Sales-Hits	GM-CTS	Customer Type
A or B	A or B	Core Customer
C or D	A or B	Opportunistic Customer
C or D	C or D	Marginal Customer
A or B	C or D	Service Drain

The percentage of profitable customers versus not-so-profitable customers is a metric that can be used to reflect the effectiveness of the customer stratification process.

Additionally, implementing customer stratification effectively will result in the ability to redeploy sales force time away from the service drain customer toward more profitable customers. With the sales focus on core and opportunistic customers revenue, EBITDA, and RONA will all improve. As with cost to serve, the figure below illustrates the connection between customer stratification and improved profit.

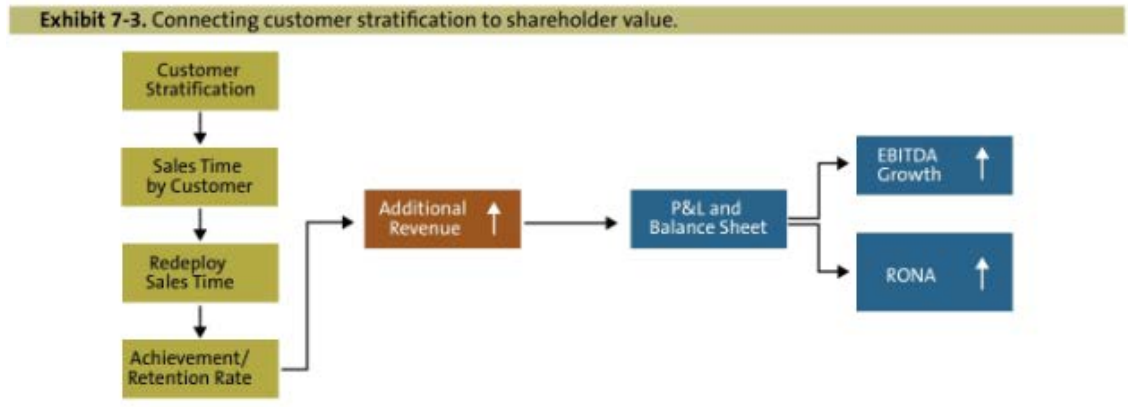


Figure13 (Lawrence, Gunasekaren, & Krishnadevarajan, *Optimizing Distributor Profitability*, 2009)

5.2 Pricing Strategy

Pricing optimization

Customer stratification helps to inform pricing and marketing strategies. Understanding cost to serve and individual customer profitability is a critical first step to developing a pricing optimization strategy. Pricing optimization has always been, and remains, a key component of utility distributor profitability. As the data revealed in the case of the Transformers and Laggards, pricing is critical to the viability of the firm. Price optimization techniques determine right price for any item-customer-location combination.

Customer Item Visibility

The first step in optimizing price is the process of Customer Item Visibility. This can be viewed as inventory stratification from the customer perspective. It takes into consideration that one customer's A item might be another customer's D item; thus, instead of applying pricing by item, this method prices based on item-customer combinations.

Best practice criteria includes: hits, sales, and recency of transactions

The following are the detailed steps of identifying customer item visibility

1. Hits

A= more than 12 hits per year or once per month

B= 6-12

C= 3-6

D= 1-3

2. Sales

A= \$100k or more

B= \$50k-\$100k

C= \$25k-\$50k

D=less than \$25k

3. Recency of transaction

A = transactions within last three months

B= transactions with last 4-6 months

C= transactions within last 7-9 months

D = transactions within last 10-12 months

4. Combine the three dimensions using the weight categories used in the CTS model earlier. The final ranks of A & B get assigned "High Visibility". C is assigned "Medium Visibility" and D is assigned "low Visibility"

Understanding the importance customer's place on a given item provides powerful information when developing pricing strategy and making pricing decisions. Customers tend to be more price tolerant on low visibility items that are not part of their core revenue strategy. For instance, chip sets are high visibility to Dell Computers. They spend a great deal of money on a continual basis for chip sets. The high visibility of this item for Dell makes the item very price sensitive. On the other hand, Dell would be

much less price sensitive to hiring an accounting consultant. Having awareness of item visibility allows distributors to raise prices on low visibility items increasing margins at lower risk levels.

Pricing Methods

Common pricing methods include cost-plus, value-based, and market-based pricing. The problem with these methods of pricing is that they do not take into consideration the internal company factors such as inventory turns or item gross margin nor does it consider customer profiles such as cost to serve, item access or item penetration.

Based on research performed at Texas A&M University, there are five key pricing variables. Customer type which is found through the customer stratification process. Second, item rank which is a result of item stratification. Item rank is not covered in this research. However, it is common for distributors today to have best practices implemented around item ranking. Customer item visibility, covered in the previous section is also one of the key pricing variables. Finally, item unit cost and historic gross margin levels. Including all of these variables in pricing methods has been shown to optimize pricing strategy.

Pricing management affects gross revenue, total asset turnover, and revenue growth. Pricing decisions represents at least half of distributor's profitability. Research at Texas A&M has seen margins improve 6% using this pricing method (Lawrence, Gunasekaren, & Krishnadevarajan, Optimizing Distributor Profitability, 2009) .

5.3 Marketing Strategy

The customer stratification helps identify core customers and determines the customer segment based on four dimensions: revenue, profitability, cost to serve, and loyalty. Each customer segment will have a different pricing strategy. Once the customer segmentation and pricing approach is established, the next step is to understand core customers needs and align them with your company's core capabilities.

A robust marketing strategy will identify those market segments to determine the target market and develop unique value propositions for each market segment.

Marketing strategy addresses market definition, target market, and value proposition. A well thought out and executed marketing strategy will identify the business you want to do through appropriately aligning your core business capabilities that match the needs of your core customer.

Market Segmentation

Market segmentation recognizes commonalities among customers and develops customer types based on these common characteristics. By recognizing differences in customer expectations, firms can develop a differentiated market strategy along with unique value propositions and maximize the sales and marketing resources. Most electrical distributors tend to create macro segments based on business type-commercial, industrial, residential, and utilities. Macro segments differentiate customers at a surface level based on primary business activity. Electric Utility distributor sales force are already operating within the utility macro segment.

However, often macro segmentation does not provide much difference in terms of needs or value proposition. Best practice for market segmentation consists of both macro and micro segmentation. Micro-segmentation is often based on customers' buying criteria. Of the NAAUD members surveyed, only 17% of respondents indicated they utilized a micro-segmentation strategy. Micro-segmentation is instrumental in identifying customers' unique critical success factors. This matrix below demonstrates the two-tiered segmentation. The macro-segment consists of industrial, commercial, residential, and utilities. The critical success factors in the illustration include: availability of items, price of items, technical support, credit terms, shipping accuracy, & delivery. Once macro segmentation is performed, you would cluster customers based on their critical success factors.



Figure 14

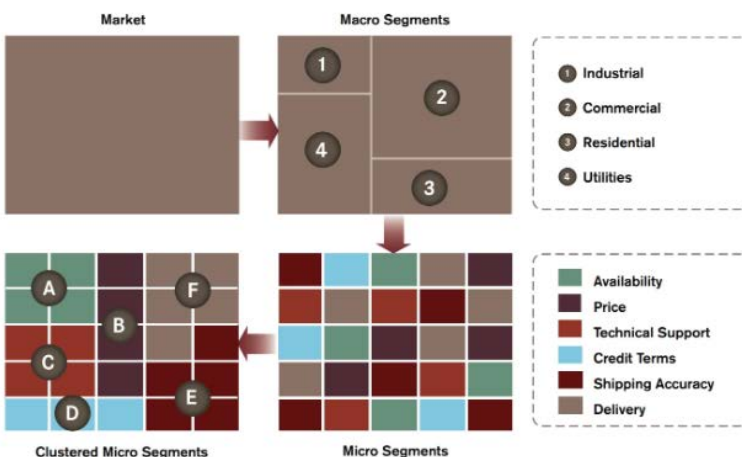


Figure 15 (Lawrence, Gunasekaran, & Krishnadevarajan, Sales and Marketing Optimization, 2012)

Some industrial distributors create micro-segments by subdividing the market into investor owned, publicly owned, and cooperatives. Some micro-segment are based on size of utility or geographic region or a combination of the three. Others create a three-tiered approach using buying criteria based on

lines of trade and customer needs including: delivery reliability, breadth of products, technical support, credit terms, pricing. The chart below displays an example of how a firm can utilize information system data to identify the customer buying behavior and then applied criteria against it. In this example, the company chose line penetration, number of orders, items accessed, price, days to pay, sales force time, deliveries as criteria to determine the micro-segments. The micro-segmentation emerges from clusters of common buying criteria. From the micro-segmentation activity, a marketing mix can be developed. The marketing mix includes value added services offered, pricing methodologies, sales approach, and customer service support.

Micro Segments	Product Breadth		Reliability	Slow-Move Inventory	Price	Credit Terms	Technical Support	Delivery	
	1	2	3	4	5	6	7	8	9
Customer Number	Number of Lines Accessed	Line Penetration	Number of Orders	% C and D Items Accessed	Lowest Price Items	Days-to-Pay	Number of Calls to Technical Team	Number of Same-Day Deliveries	% of Same-Day Deliveries
MS0001	2	20%	33	48%	Y	19	17	21	64%
MS0002	5	50%	169	77%	N	15	3	41	24%
MS0003	1	10%	44	48%	Y	61	0	19	43%
MS0004	3	30%	71	100%	N	8	6	16	23%
MS0005	6	60%	93	55%	N	32	12	34	37%
MS0006	1	10%	32	50%	Y	44	0	10	31%
MS0007	2	20%	47	43%	N	17	4	39	83%
MS0008	2	20%	61	40%	N	7	11	13	21%
MS0009	3	30%	36	0	N	55	7	4	11%
MS0010	4	40%	178	0	Y	30	3	31	17%
MS0011	2	20%	54	13%	N	5	3	30	56%
MS0012	2	20%	65	100%	N	81	13	15	23%
MS0013	1	10%	33	35%	Y	45	3	25	76%
MS0014	7	70%	107	100%	N	32	5	27	25%
MS0015	6	60%	38	14%	N	53	9	12	32%
MS0016	5	50%	59	57%	Y	24	2	47	80%
MS0017	2	20%	71	75%	N	3	12	26	37%
MS0018	4	40%	41	17%	Y	81	10	4	10%
MS0019	1	10%	60	0	Y	99	4	29	48%
MS0020	8	80%	197	9%	N	11	3	69	35%

Figure 16 (Lawrence, Gunasekaran, & Krishnadevarajan, Sales and Marketing Optimization, 2012)

Target Market

Target market selection is concerned with choosing the micro-segment based on ROI. Best practice selects target markets based on

1. Analyze the markets revenue potential and cost to serve (Revenue-Expenses)
2. Analyze your company's capabilities and customers critical success factors (-Expenses)
3. Determine required investment & resources needed to fill capabilities gap (Assets)

4. Assess Risk

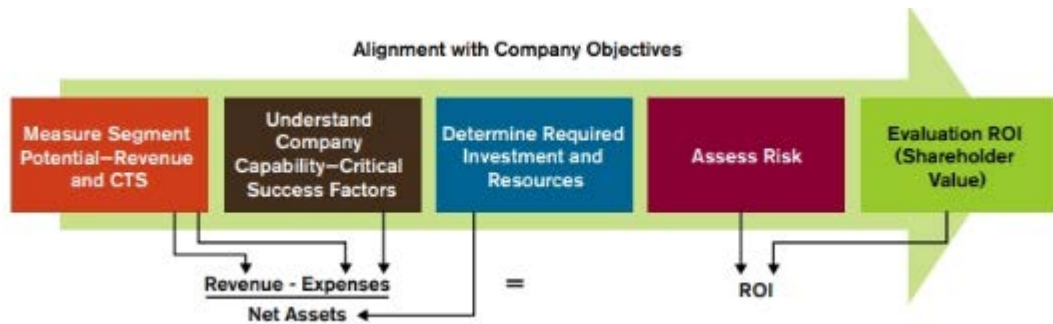


Figure 17 (Lawrence, Gunasekaran, & Krishnadevarajan, *Sales and Marketing Optimization*, 2012)

The target market selection requires revenue, expenses and asset forecasts

Value proposition

Value proposition describes why a customer should do business with you and should consider three elements: is it attractive to customer? Does it provide differentiation among you and competitors? Does it create shareholder value?

Best practice in developing the value proposition describes the business you want to do and quantifies benefits and features.

Micro segmentation as well as customer stratification is necessary in order to develop an effective value proposition. Knowing who your core customers are provides evidence of the business you want to do while target market selection will inform market potential and identify any gaps in capabilities. Micro-segmentation provides the strategy for how to attract the business you want to do by understanding the critical to serve elements of the segment.

To understand the marketing strategy ROI and its contribution to profitability, appropriate metrics need to be identified. For example, time-to-market and qualified leads per marketing activity can be used to measure the effectiveness of the marketing strategy. These metrics drive revenue and marketing expenses. Revenue is linked to gross margin and revenue growth. Marketing expenses are linked to EBITDA.

6.0 RECOMMENDATIONS

Often when companies embark on process improvement initiatives, processes are analyzed and performed in silos of one functional area or another. This piecemeal approach often will not yield the results promised or hoped for causing lack of confidence in the improvement. The improvement quickly loses momentum and the firm reverts to the “old way of doing” things sometimes in spite of the stated process. Two approaches developed within the sales and marketing framework discussed in this paper will help prevent the erosion of process improvement efforts.

First, taking a more holistic view of process improvement strategies identifies and acknowledges improvement dependencies that build on one another. The sales and marketing optimization framework presented in this paper illustrates how pricing and marketing optimization are highly dependent on effective customer stratification and pricing strategies. Conversely, if a company stops improvement at customer ranking or does not perform best practice customer ranking without applying it to pricing and marketing decisions, a great deal of the improvement value is lost.

Another important aspect of the sales and marketing optimization framework is the identification of relevant and appropriate metrics which can be tied back to shareholder value. Having the ability to continuously not only quantify the improvement but also show the impact to ROI and profitability keeps the spotlight on the improvement gaining momentum for other improvements. But more importantly, tying process optimization metrics to shareholder value substantially adds to the health of the business. Having the ability to tie process improvements to shareholder value enables the company to have deeper understanding into its profitability picture as well as position it better strategically to embark on future expansion and improvement efforts.

For electric distributors operating within the utility segment implementation of a framework such as the one laid out in this paper could represent the difference of life or death for the company. With razor thin profit margins and increase competition from deep pocket companies with sophisticated e-commerce platforms, utility distributors must optimize their pricing and marketing strategies.

Disruption and change is occurring in the utility market but research shows the industry revenue, profit, and capital expenditures holding steady in the foreseeable future. The key is to understand the micro-segment, their capital expenditure priorities and appropriately aligning your company with those utilities looking for your core capabilities. Electric energy is changing and will look different. But having a better understanding of the micro-segments will enable distributors to remain flexible and develop unique value propositions for those segments. Innovation will continue to bring exciting opportunities for companies that have built robust process frameworks into their operations and are poised to capitalize on those opportunities.

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